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U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE DIVISION - PLANT VARIETY PROTECTION		The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a).			
APPLICATION FOR PLANT VARIETY PROTECT (Instructions and information collection burden sta	ION CERTIFICATE				
1. NAME OF APPLICANT(S) (as it is to appear on the Contricate)	(Billetif Oli Level24)	2. TEMPORARY DESIGNATION OR	3. VARIETY NAME		
Pioneer Hi-Bred International, Inc	· •	EXPERIMENTAL NUMBER			
riomeer ar brea international, inc	•		9313		
A ADDRESS (See Assessment Assessm					
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and	Country)	5. TELEPHONE finclude area code!	FOR OFFICIAL USE ONLY		
700 Capital Square 400 Locust St.	•	515/270-3582	960060		
Des Moines, IA 50309		8. FAX (include area code)	F DATE		
		515/253-2288	1		
		313/233 2200	* NOV 22, 1995		
7. GENUS AND SPECIES NAME	8. FAMILY NAME (Bo	tenical)	PICING AND EXAMINATION FEE		
Glycine Max	Leguminosa	ie	# 2450 <u>20</u>		
CROP KIND NAME (Common name)		V	*		
Soybean			A NOV. 22 1995		
<ol> <li>IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGA Corporation</li> </ol>	NIZATION (corporation, partne	rship, esecciation, etc.) (Common hame)	76 2000		
11. IF INCORPORATED, GIVE STATE OF INCORPORATION		I TAY OF WOODS I VOL			
Iowa		12. DATE OF INCORPORATION 1926	E PATE		
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO	SERVE IN THIS APPLICATIO	M AND RECEIVE ALL GARENC	14. TELEPHONE (include area code)		
John Grace	Mike Roth		515/270-3582		
7300 NW 62nd Ave.	700 Capita		313/2/0 3302		
PO Box 1004 400 Locust			15. FAX (include area coda)		
Johnston, IA 50131-1004	Des Moines	, IA 50309	515/253-2288		
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED IF IN	low instructions on reverse)				
Exhibit A. Origin and Breading History of the Veriety     Exhibit B. Statement of Distinctness		•			
e. I Exhibit C. Objective Description of the Veriety	٠,		•		
d. 🔀 Exhibit D. Additional Description of the Variety					
e. 🔯 Exhibit E. Statement of the Basis of the Applicant's Ownership			•		
1.  Voucher Sample (2,500 visible untreated seeds or, for tuber proper  9.  Filing and Exemination Fee (2,2450) made payable to ST	igeted varieties verification the	of tissue culture will be deposited and maintain	ned in a public repository)		
A TO THE PROPERTY OF TASHADAY MINERS DESCRIPTION TO TABLE SE					
7. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD  YES #1 "yes," enswer from 18 and 19 below)	l≧ NO #f "no," (	is a class of certified seed? (See Secti go to itum 20)	ion 83(a) of the Plant Variety Protection Act)?		
8. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMIT GENERATIONS?	TED AS TO NUMBER OF	18. IF "YES" TO ITEM 18, WHICH CLASSES	OF PRODUCTION BEYOND BREEDER SEED?		
☐ YES ☐ NO		☐ FOUNDATION ☐ REGISTER			
<ol> <li>HAB THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN</li> <li>YES #1 "yes," give names of countries and detail</li> </ol>	RELEASED, USED, OFFERED	FOR SALE, OR MARKETED IN THE U.S. OR	OTHER COUNTRIES?		
USA-1995					
The applicantial deciare that a viable sample of basic seed of the variety was applicable or for a literature.	ill ha ferminhad with analysis				
applicable, or for a tuber propagated variety a tiesue culture will be deposi-	ted in a public repository and r	n and will be replemented upon request in acci Maintained for the duration of the certificate,	ordance with such regulations as may be		
The undersigned applicantis) is lare) the owner(s) of this sexually reproduce Section 41, and is entitled to protection under the provisions of Section 42	d or tuber propagated plant va of the Plant Variety Protection	riety, and believe(s) that the variety is new, a Act,	lictinst, uniform, and stable as required in		
Applicant(s) is(are) informed that false representation herein can jeopardize	protection and result in penalti	ies.			
GNATURE OF APPLICANT POPMENTAL	FIGNAT	TURE OF APPLICANT (Owner(si)			
W. phulhace III					
MME (Please offers or type)	NAME !	(Please print or type)			
D. John Grace III					
Soybean Research Coordinator	CAPAC	ITY OR TITLE	DATE		
Coordinator (//	16/95				
D-470 (04-86) Utrevious editions are to be destroyed)	į.	(See reverse for instructions and	information collection burden statement)		

9600060

Exhibit A: Origin and Breeding History

Breeding History of 9313 Soybean

Pioneer soybean variety 9313 evolved from a cross of Pioneer variety 9293 x Pella 86. The population from which 9313 was derived was advanced to the F5 generation by modified single seed descent. The F5 plant from which 9313 was ultimately derived was selected in Ohio in 1988, and the progeny row grown in 1989. Since that time 9313 has undergone five years of extensive testing and purification, and has been observed by the breeder to be uniform and stable with no evidence of variants. In 1995, 9313 was advanced and named on the basis of superior yield and Phytophthora resistance.

8.6 acres of breeders seed were grown in Chile in the winter of 1993/1994. 210 acres of foundation seed equivalent were grown in 1994 in Ohio, producing about 8,000 bushels.

## Exhibit B: Novelty Statement

Variety 9313 is similar in flower, pubescence, and hila color to a number of varieties of similar maturity. However, it can be distinguished from these varieties by its resistance to races 1 to 5 of Phytophthora megasperma. The following varieties are susceptible to one or more of the Phytophthora races 1 to 5.

Variety	Difference
A2835 A2943	A2835 is susceptible to Phytophthora race 4, 9313 is resistant A2943 is susceptible to Phytophthora races 3 and 4, 9313 is resistant
A3242	A3242 is susceptible to Phytophthora races 1 and 3, 9313 is resistant
A3431	A3431 is susceptible to Phytophthora race 4, 9313 is resistant
AP 2990	AP 2990 is susceptible to Phytophthora race 4, 9313 is resistant
AP 3035	AP 3035 is susceptible to Phytophthora races 1 and 2, 9313 is resistant
3311	3311 is susceptible to Phytophthora race 1, 9313 is resistant
CX265	CX265 is susceptible to Phytophthora races 1 and 2, 9313 is resistant
CX273	CX273 is susceptible to Phytophthora races 1 and 2, 9313 is resistant
CX313	CX313 is susceptible to Phytophthora race 4, 9313 is resistant
FFR241	FFR241 is susceptible to Phytophthora race 1, 9313 is resistant
G3365	G3365 is susceptible to Phytophthora race 1, 9313 is resistant
12277	12277 is susceptible to Phytophthora races 3 and 4, 9313 is resistant
1N1059	1N1059 is susceptible to Phytophthora race 4, 9313 is resistant
H-1271	H-1271 is susceptible to Phytophthora race 1, 9313 is resistant
2220	2220 is susceptible to Phytophthora race 1, 9313 is resistant
F2887	F2887 is susceptible to Phytophthora races 1 and 2, 9313 is resistant
F2899	F2899 is susceptible to Phytophthora race 4, 9313 is resistant
F3110	F3110 is susceptible to Phytophthora race 1, 9313 is resistant
F3479	F3479 is susceptible to Phytophthora races 1 and 2, 9313 is resistant
11287	11287 is susceptible to Phytophthora race 1, 9313 is resistant
4689	4689 is susceptible to Phytophthora race 4, 9313 is resistant
SRF79-165	SRF79-165 is susceptible to Phytophthora race 2, 9313 is resistant
T-3290	T-3290 is susceptible to Phytophthora race 1, 9313 is resistant
257	257 is susceptible to Phytophthora races 3 and 4, 9313 is resistant
and the second s	

EXHIB!

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, SHAIN & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

## OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max L.)

NAME OF APPLICANT(S)	
Pioneer Hi-Bred International, Inc.	TEMPORARY DESIGNATION VARIETY NAME 9313
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Cod	
700 Capital Square	TOTAL OF ONLY
400 Locust Street	PVPO NUMBER
Des Moines, IA 50309	9600060
in your answer is fewer than the number of boxes provided.	riety in the features described below. When the number of significant dig place a zero in the first box when number is 9 or less (e.g., 0 9). nate soybean variety description. Other characters should be described
(2) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	
1 = Spherical (L/W, L/T, and T/W ratios = < 1.2) 3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)	2 = Spherical Flattened (L/W ratio > 1.2; L/T ratio = < 1.2) 4 = Elongate Flattened (L/T ratio > 1.2; T/W > 1.2)
★ 2. SEED COAT COLOR: (Mature Seed)	
1 = Yellow 2 = Green 3 = Brown	4 = Black 5 = Other (Specify)
3. SEED COAT LUSTER: (Mature Hand Shelled Seed)	
1 = Duil ('Corsoy 79'; 'Braxton') 2 = Shiny ('Nebsoy	r'; 'Gasoy 17')
★ 4. SEED SIZE: (Mature Seed)	
1 8 Grams per 100 seeds	
★ 5. HILUM COLOR: (Mature Seed)	
	= Gray 5 = Imperfect Black 6 = Black 7 = Other (Specify)
★ 6. COTYLEDON COLOR: (Mature Seed)	
1 1 = Yellow 2 = Green	
★ 7. SEED PROTEIN PEROXIDASE ACTIVITY:	
2 1 = Low 2 = High	·
* 8. SEED PROTEIN ELECTROPHORETIC BAND:	
1 = Type A (SP1 <sup>a</sup> ) 2 = Type B (SP1 <sup>b</sup> )	
S. HYPOCOTYL COLOR:	
3 1 = Green only ('Evans'; 'Davis') 2 = Green with br 3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71') 4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Co	ronze band below cotyledons ('Woodworth'; 'Tracy') oker Hampton 266A')
T10. LEAFLET SHAPE:	
3 1 = Lanceolate 2 = Oval 3 = Ovate	4 = Other (Specify)

FORM LMGS-470-57 (6-83)

(Edition of 2-82 is obsolete.)

2 1 = Sn 3 = La	nall ('Amsoy 71'; 'A5312') rge ('Crawford'; 'Tracy')	2 = <b>M</b> ed	ium ("Corsoy 79"; "Gasoy 17	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	960006
	ght Green ('Weber'; 'York') rk Green ('Gnome'; 'Tracy')	2 = Medi	ium Green ('Corsoy 79'; 'Bra	USDA-AMS-PV	P0
★ 13. FLOWER COLO	DR:	•:		95 NOV 22 P2:	49
2 1 = Wh	ite 2 = Purple	3 = White w	ith purple throat	;	
14. POD COLOR:					·
2 1 = Tan	2 = Brown	3 = Black		•	
15. PLANT PUBESC	ENCE COLOR:				
1 = Gra	y 2 = Brown (Tawny)				
16. PLANT TYPES:		· .			
2 1 = Slen 3 = Bush	der ('Essex'; 'Amsoy 71') ly ('Gnome'; 'Govan')	2 = Intern	nediate ('Amcor'; 'Braxton')		
17. PLANT HABIT:  1 = Determine 3 = Indetermine 1	rminate ('Gnome'; 'Braxton') terminate ('Nebsoy'; 'Improved Po	2 = Semi-E elican')	eterminate ('Will')	:	
18. MATURITY GRO  1 = 000 9 = VI	UP: 2 = 00 3 = 0 10 = VII 11 = VII	4=I I 12=IX	5 = II 6 = III 13 = X	7 = IV 8 = V	
19. DISEASE REACT	ION: (Enter 0 = Not Tested; 1 =	Susceptible; 2 = Res	istant)		
BACTERIAL DIS  ★ 0 Bacterial I	SEASES: Pustule ( <i>Xanthomonas phaseoli va</i>	nr. <i>sojensis)</i>			
★ 1 Bacterial (	Blight (Pseudomonas glycinea)	·			
★ 0 Wildfire (F	seudomonas tabaci)	et.			
FUNGAL DISEASE	:S:			•	**
<b>-</b>	ot (Septoria glycines)				
Frogeye Le	eaf Spot (Cercospora sojina)				
Race 1	0 Race 2 0 Rac	æ3 0 Ra	ce 4 0 Race 5	Other (Specify)	
0 Target Spor	t (Corynespora cassiicola)				
O Downy Mile	dew (Peronospora trifoliorum var	. manshurica)			, ,
0 Powdery Mi	ildew (Microsphaera diffusa)	· •			
T Brown Sten	Rot <i>(Cephalosporium gregatum)</i>				
0 Stem Canke	r (Diaporthe phaseolorum var. cae	ulivora)			

11. LEAFLET SIZE:

19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)  FUNCAL DISEASES: (Continued)  **	19 DISEASE DEACT	10M: /C 0M						
# I Pod and Stem Bilght (Disporthe phesolatum var. zajae)  Purple Seed Stain (Corcospora kituchil)  I Rhicscoinia Root Rot (Rhicscoina solami)  Phytophthore Rot (Phytophthora magasperma var. zajae)  # 2 Race 1 2 Race 2 2 Race 3 2 Race 4 2 Race 5 0 Race 6 2 Race 7  2 Race 8 2 Race 9 Other (Specify)  VIRAL DISEASES:  Bud Blight (Tobacco Ringspoe Virus)  1 Yollow Mosaic (Corpas Chizoric Virus)  1 Yollow Mosaic (Rean Yellow Mosaic Virus)  * 1 Seed Mortie (Bean Pold Mortie Virus)  * 1 Seed Mortie (Seen Pold Mortie Virus)  NEMATODE DISEASES:  Sovibean Crist Nematods (Helandrog sylvines)  * 0 Race 1 0 Race 2 Race 3 0 Race 4 Other (Specify)  O Lunce Nematods (Helandrog Sylvines)  * 0 Race 1 0 Race 2 Race 3 0 Race 4 Other (Specify)  O Lunce Nematods (Helandrog Sylvines)  * 0 Race 1 0 Race 2 Race 3 0 Race 4 Other (Specify)  O Panut Rock Knot Nematods (Melandrogyne incognitus)  * 0 Northern Rock Knot Nematods (Melandrogyne incognitus)  * 0 Northern Rock Knot Nematods (Melandrogyne incognitus)  * 0 OTHER DISEASE NOT ON FORM (Specify):  20. PHYSIOLOGICAL RESPONSES: (Eater 0 = Not Tested: 1 = Sucoptible; 2 = Resistant)  * I Iron Chlorosis on Calcarecous Soil  Other (Specify)  21. INSECT REACTION: (Einer 0 = Not Tested: 1 = Sucoptible; 2 = Resistant)  Mexican Bean Beats (Epitichne varivatis) :  O Mexican Bean Beats (Epitichne varivatis) :  NAME OF VARIETY  CHARACTER Specify 9303  Seed State 9303  Leaf Color Pella 86  Seed State 9303  Leaf Color Pella 86	15. DISEASE REAL!	IUN: (Enter 0 = Not Tested; 1 = Susceptible;	2 = Resistant) (Continued)					
Proce and Stein Blight (Discorbine phasesicitum var; reject)  Privipe Seed Stain (Corceopora kikuchii)  Rhiscotonia Root (Phytophthara misgapperma var. reject)  Race 1	, , , , , , , , , , , , , , , , , , , ,	ASES: (Continued)	Substitute (Substitute of Substitute of Subs	- Middle of them.				
A Riscotonia Root Root (Ristotonia solani)  Phytophthora Rot (Phytophthora magasperma vat. sojae)  ** 2 Race 1	Pod and	Stem Blight <i>(Diaporthe phaseolorum var<b>; sojae</b>)</i>	1					
Phytophthors Rot (Phytophthors mospaperme var. sojee)    Race 1	0 Purpie Se	ed Stain ( <i>Cercospora kikuchii)</i>						
## 2 Race 1 2 Race 2 2 Race 3 2 Race 4 2 Race 5 0 Race 6 2 Race 7    Race 8 2 Race 9	1 Rhizoctor	nia Root Rot (Rhizoctonia solani)						
Race 8   Race 9   Chher (Specify)	Phytophti	hora Rot (Phytophthora megasperma var. sojae	)					
VIRAL DISEASES:	★ 2 Race 1	2 Race 2 2 Race 3 2	Race 4	9 5 0 Race 6	2 Race 7			
Sud Blight (Tobacco Ringspot Virus)   Yellow Mosaic (Bean Yellow Mosaic Virus)   Yellow Mosaic (Gean Yellow Mosaic Virus)   Cowpea Mosaic (Cowpea Chlorotic Virus)   Dod Mottle (Bean Pod Mottle Virus)   Rod Mottle (Bean Pod Mottle Virus)   I Seed Mottle (Soybean Mosaic Virus)   NEMATODE DISEASES:   Soybean Cyst Nematode (Heterodera glycines)   Race 1	2 Race 8	2 Race 9 Other (Specify)						
Yellow Mosaic (Bean Yellow Mosaic Virus)   Cowpea Mosaic (Cowpea Chlorotic Virus)   1	VIRAL DISEASI	ES:		·				
Cowpea Mosaic (Cowpea Chlorotic Virus)    Cowpea Mostie (Bean Pod Mortie Virus)   Ded Mortie (Bean Pod Mortie Virus)   Seed Mottle (Soybean Mosaic Virus)   NEMATODE DISEASES:   Soybean Cyst Nematode (Heterodera glycines)   Race 1	Bud Blight	(Tobacco Ringspot Virus)						
Decide Mottle (Bean Pod Mottle Virus)    1	1 Yellow Mo	saic (Bean Yellow Mosaic Virus)						
*   Seed Mottle (Soybean Mosaic Virus)  NEMATODE DISEASES:  Soybean Cryst Nematode (Heterodara glycines)  *   0   Race 1   0   Race 2   1   Race 3   0   Race 4   0   Other (Specify)	★ 1 Cowpea M	osaic (Cowpea Chlorotic Virus)						
NEMATODE DISEASES:  Sovbeen Cyst Nematode (Heterodera glycines)  Acc 1	1 Pod Mottle	(Bean Pod Mottle Virus)						
Soybean Cyst Nematode (Heterodera glycines)  ***	★ 1 Seed Mottle	e (Soybean Mosaic Virus)			,			
★ 0 Race 1 0 Race 2 1 Race 3 0 Race 4 Other (Specify)   0 Lance Nematode (Hopiculaimus Colombus)   ★ 0 Southern Root Knot Nematode (Meloidogyne incognita)   ★ 0 Northern Root Knot Nematode (Meloidogyne Hapla)   0 Peanut Root Knot Nematode (Meloidogyne arenaria)   0 Reniform Nematode (Roty/anchulus reniformis)   0 OTHER DISEASE NOT ON FORM (Specify):   20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)   ★ 1 Iron Chlorosis on Calcareous Soil   0 Other (Specify)    21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)  O Mexican Bean Beetle (Epilachna varivestia):  O Potato Leaf Hopper (Empoasca fabee)  Other (Specify)  22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.  CHARACTER NAME OF VARIETY CHARACTER NAME OF VARIETY Plant Shape 9293 Seed Coat Luster 9293  Leaf Shape 9303 Seed Size 9303  Leaf Color Pella 86 Seed Shape 9303  Leaf Size 9303 Seedling Pigmentation Pella 86  Seedling Pigmentation Pella 86  Seedling Pigmentation Pella 86  Seedling Pigmentation Pella 86  Seed Size 9303  Seedling Pigmentation Pigmentation Pella 86  Seed Size 9303  Seed	NEMATODE DIS	EASES:						
Lance Nematode (Hopiclaimus Calombus)  Lance Nematode (Hopiclaimus Calombus)  Deanut Root Knot Nematode (Meloidogyne incognits)  Northern Root Knot Nematode (Meloidogyne arenaria)  Reniform Nematode (Rotylenchulus reniformis)  OTHER DISEASE NOT ON FORM (Specify):  20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)  Iron Chlorosis on Calcareous Soil  Other (Specify)  21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)  Mexican Bean Beetle (Epilachna varivestis)  Other (Specify)  22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.  CHARACTER NAME OF VARIETY  Plant Shape 9293 Seed Coat Luster 9293  Leaf Shape 9303 Seed Size 9303  Leaf Color Pella 86 Seed Shape 9303  Leaf Size 9303 Seedling Pigmentation Pella 86	Soybean Cy	st Nematode (Heterodera glycines)						
Southern Root Knot Nematode (Meloidogyne incognita)  Northern Root Knot Nematode (Meloidogyne Hapla)  Peanut Root Knot Nematode (Meloidogyne arenaria)  Reniform Nematode (Rotylenchulus reniformis)  OTHER DISEASE NOT ON FORM (Specify):  20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)  Iron Chlorosis on Calcareous Soil  Other (Specify)  21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)  Mexican Been Beetle (Epilachna varivestis)  O Potato Leaf Hopper (Empossos fabse)  Other (Specify)  22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.  CHARACTER NAME OF VARIETY CHARACTER NAME OF VARIETY  Plant Shape 9293 Seed Coat Lister 9293  Leaf Shape 9303 Seed Size 9303  Leaf Color Pella 86 Seed Shape 9303  Leaf Size 9303 Seedling Pigmentation Pella 86	★ 0 Race 1	0 Race 2 1 Race 3 0	Race 4 Other	(Specify)				
Northern Root Knot Nematode (Meloidogyne Hapla)  Peanut Root Knot Nematode (Meloidogyne arenaria)  Reniform Nematode (Rotylenchulus reniformis)  OTHER DISEASE NOT ON FORM (Specify):  20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)  Iron Chlorosis on Calcareous Soil  Other (Specify)  21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)  Mexican Bean Beetle (Epilachne verivestis):  O Potato Leaf Hopper (Emposses fisbae)  Other (Specify)  22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.  CHARACTER NAME OF VARIETY CHARACTER NAME OF VARIETY  Plant Shape 9293 Seed Cost Luster 9293  Leaf Shape 9303 Seed Size 9303  Leaf Color Pella 86 Seed Shape 9303  Leaf Size 9303 Seedling Pigmentation Pella 86	0 Lance Nem	atode (Hoplolaimus Colombus)			-			
Peanut Root Knot Nematode (Meloidogyne arenaria)  Reniform Nematode (Rotylenchulus reniformis)  OTHER DISEASE NOT ON FORM (Specify):  20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)    Iron Chlorosis on Calcareous Soil   Other (Specify)    21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)   Mexican Bean Beetle (Epilachna varivestis)     O Potato Lesf Hopper (Emposses fabse)     Other (Specify)    22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.  CHARACTER   NAME OF VARIETY   CHARACTER   NAME OF VARIETY   Plant Shape   9293   Seed Coat Luster   9293     Leaf Shape   9303   Seed Shape   9303     Leaf Color   Pella 86   Seed Shape   9303     Leaf Size   9303   Seedling Pigmentation   Pella 86	★ 0 Southern R	oot Knot Nematode (Meloidogyne incognita)						
Reniform Nematode (Rotylenchulus reniformis)  OTHER DISEASE NOT ON FORM (Specify):  20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)    Iron Chlorosis on Calcareous Soil  Other (Specify)  21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)    Mexican Bean Beetle (Epilachna varivestis) :   O Potato Leaf Hopper (Empoasca fabse)  Other (Specify)  22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.  CHARACTER NAME OF VARIETY CHARACTER NAME OF VARIETY  Plant Shape 9293 Seed Coat Luster 9293  Leaf Shape 9303 Seed Size 9303  Leaf Color Pella 86 Seed Shape 9303  Leaf Size 9303 Seedling Pigmentation Pella 86	★ 0 Northern Re	pot Knot Nematode (Meloidogyne Hapla)			•			
OTHER DISEASE NOT ON FORM (Specify):  20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)    Iron Chlorosis on Calcareous Soil	0 Peanut Room	t Knot Nematode (Meloidogyne arenaria)						
OTHER DISEASE NOT ON FORM (Specify):  20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)    Iron Chlorosis on Calcareous Soil	0 Reniform N	ematode (Rotylenchulus reniformis)						
20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)    Iron Chlorosis on Calcareous Soil		•	·					
Iron Chlorosis on Calcareous Soil   Other (Specify)   Other (Specify)								
Other (Specify)  21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)  0 Mexican Bean Beetle (Epilachna varivestis)  0 Potato Leaf Hooper (Empoasca fabae)  Other (Specify)  22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.  CHARACTER NAME OF VARIETY CHARACTER NAME OF VARIETY  Plant Shape 9293 Seed Coat Luster 9293  Leaf Shape 9303 Seed Size 9303  Leaf Color Pella 86 Seed Shape 9303  Leaf Size 9303. Seed Shape 9303  Leaf Size 9303. Seed Shape 9303  Leaf Size 9303. Seed Shape 9303	20. PHYSIOLOGICAL RI	ESPONSES: {Enter 0 = Not Tested; 1 = Suscep	rtible; 2 = Resistant)					
21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)  O Mexican Bean Beetle (Epilachna varivestis)  O Potato Leaf Hopper (Empoasca fabae)  Other (Specify)  22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.  CHARACTER NAME OF VARIETY CHARACTER NAME OF VARIETY  Plant Shape 9293 Seed Coat Luster 9293  Leaf Shape 9303 Seed Size 9303  Leaf Color Pella 86 Seed Shape 9303  Leaf Size 9303  Seed Shape 9303  Seed Shape 9303  Pella 86	Iron Chiorosi	is on Calcareous Soil						
O Mexican Bean Beetle (Epilachna varivestis)  O Potato Leaf Hopper (Empoasca fabae)  Other (Specify)  22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.  CHARACTER NAME OF VARIETY CHARACTER NAME OF VARIETY  Plant Shape 9293 Seed Coat Luster 9293  Leaf Shape 9303 Seed Size 9303  Leaf Color Pella 86 Seed Shape 9303  Leaf Size 9303  Seed Size 9303  Pella 86	Other (Special	fy)	····					
Potato Leaf Hopper (Empoasca fabae)  Other (Specify)  22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.  CHARACTER NAME OF VARIETY CHARACTER NAME OF VARIETY  Plant Shape 9293 Seed Coat Luster 9293  Leaf Shape 9303 Seed Size 9303  Leaf Color Pella 86 Seed Shape 9303  Leaf Size 9303 Seed Shape 9303  Leaf Size 9303 Seed Shape 9303	21. INSECT REACTION:	(Enter 0 = Not Tested; 1 = Susceptible; 2 = Ro	esistant)					
Other (Specify)  CHARACTER NAME OF VARIETY  Plant Shape 9293  Leaf Shape 9303  Leaf Color Pella 86  Seed Size 9303  Leaf Size 9303  Seed In Pigmentation  Pella 86	0 Mexican Bear	Beetle (Epilachna varivestis)						
Other (Specify)           22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.           CHARACTER         NAME OF VARIETY         CHARACTER         NAME OF VARIETY           Plant Shape         9293         Seed Coat Luster         9293           Leaf Shape         9303         Seed Size         9303           Leaf Color         Pella 86         Seed Shape         9303           Leaf Size         9303         Seedling Pigmentation         Pella 86	O Potato Leaf H	lopper (Empoasca fabae)	the second strains with the	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.           CHARACTER         NAME OF VARIETY         CHARACTER         NAME OF VARIETY           Plant Shape         9293         Seed Coat Luster         9293           Leaf Shape         9303         Seed Size         9303           Leaf Color         Pella 86         Seed Shape         9303           Leaf Size         9303         Seedling Pigmentation         Pella 86		v)	· ·					
CHARACTER         NAME OF VARIETY         CHARACTER         NAME OF VARIETY           Plant Shape         9293         Seed Coat Luster         9293           Leaf Shape         9303         Seed Size         9303           Leaf Color         Pella 86         Seed Shape         9303           Leaf Size         9303         Seedling Pigmentation         Pella 86								
Plant Shape         9293         Seed Coat Luster         9293           Leaf Shape         9303         Seed Size         9303           Leaf Color         Pella 86         Seed Shape         9303           Leaf Size         9303         Seed Shape         9303           Leaf Size         9303         Seed Shape         Pella 86			7					
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Leaf Color         Pella 86         Seed Shape         9303           Leaf Size         9303         Seedling Pigmentation         Pella 86	Leaf Shape	2						
Leaf Size 9303 Seedling Pigmentation Pella 86	Leaf Color							
Pella 86	Leaf Size				~			

VARIETY	NO. OF DAYS	PLANT LODGING	CM PLANT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100	NO.
<del>-</del>	MATURITY	SCORE	HEIGHT	CM Width	CM Length	% Protein	% Oii	SEEDS	SEEDS/ POD
9313 Submitted	133	2.2	90.3	5.7	10.1	42.5	20.8	18.0	3
9303 Name of Similar Variety	132	1.8	87.3	5.4	19.2	42,9	20,8	17.6	3

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

- 1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
- 2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725. 3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A<sub>2</sub> in the USDA soybean germplasm control.

  4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1719.

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## Exhibit D: Additional Description of Variety

In Exhibit C we have identified 9313 as susceptible to bacterial blight, brown spot, pod and stem blight, rhizoctonia root rot, bud blight, yellow mosaic, cowpea mosaic, pod mottle and seed mottle. This does not mean we consider 9313 to be worse than other varieties of similar maturity in reaction to these challenges. Rather, we have chosen to be conservative and have identified 9313 as "susceptible".

Variety 9313 is an early group III variety. If group III maturities are divided into tenths, the relative maturity of 9313 is 3.1.

## Exhibit E: Statement of the Basis of Applicants Ownership

Variety 9313 was originated and developed by plant breeders (U.S. nationals) from whom, by agreement, Pioneer Hi-Bred Int'l, Inc. has obtained exclusive rights to 9313. No rights to such invention, discovery or development are retained by the plant breeder or any other party.

P. 04 9600060

		RM APPROVED - OMB NO. 0581-0055			
u,s, department of agriculture agricultural marketing service	1974 (5 U.S.C. 552a) and the Paperwork R	The following statuments are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Peperwork Reduction Act (PRA) of 1995.			
EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to de certificate is to be issued (7 U.S.C. 2- until certificate is issued (7 U.S.C. 24	121). Information is held confidential			
. Name Of Applicant(s)	2. Temporary Designation Or Experimental Number	3. Variety Name			
Pioneer Hi-Bred International, Inc.		9313			
. Address (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)	5. Telephone (Include area code)	6, Fax (Include area code)			
7300 NW 62nd Ave	515-270-3582	515-253-2288			
P.O. Box 1004 Johnston, Iowa 50131-1004	7. PVPO Number 96 000	60			
. Does the applicant own all rights to the variety? Mark an "X" in appropriat	te block. If no, Please explain.	YES   NO			
), is the applicant (individual or company) a U.S. national or U.S. based com	pany?	₩ YEŞ NO			
0. Is the applicant the original owner? ✓ YES ☐ NO	If no, please answer one of the follow	ing:			
a. If original rights to variety were owned by individual	(s), is (are) the original owner(s) a U.S.	national(s)?			
YES   NO If no, give name of coun	try				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
b. If original rights to variety were owned by a company  [ YES ]. NO If πο, give name of coun		S. based company?			
11. Additional explanation on ownership (If needed, use reverse for extra	space):				
		· .			
LEASE NOTE:	<u> </u>				
Plant variety protection can be afforded only to owners (not licensees) who	meet one of the following criteria:				
If the rights to the variety are owned by the original breeder, that person national of a country which affords similar protection to nationals of the	must be a U.S. national, national of a	UPOV member country, or			
<ol><li>If the rights to the variety are owned by the company which employed the nationals of a UPOV member country, or owned by nationals of a country genus and species.</li></ol>	is original breeder(s), the company mu				
3. If the applicant is an owner who is not the original owner, both the origin	nal owner and the applicant must meel	one of the above criteria.			
the original breeder/owner may be the Individual or company who directed to definition.					
According to the Paperwork Reduction Act of 1995, no persons are required control number. The valid OMB control number for this information collecticallection is estimated to average 10 minutes per response, including the tirend maintaining the data needed, and completing and reviewing the collection	on is 0581-0055. The time required to one for reviewing instructions, searching	complete this information			
The U.S. Department of Agriculture (USDA) prohibits discrimination in its pro disability, political beliefs, and marital or familial status. (Not all prohibited b ulternative means for communication of program information (braille, large p Communications at 202-720-2600 (voice and TDD). To file a complaint, write the Secretary of Agriculture, U.S. Department of Ag	bases apply to all programs.) Persons print, audiotape, etc.) should contact th	with disabilities who require se USDA Office of			